UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service

SOME ECONOMIC ASPECTS OF PRESENT COTTON-GIN EMPLACEMENTS

By G. S. Meloy, Senior Marketing Specialist

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Gentlemen:

I want to call your attention to some tables of figures relative to what might be thought of as the cotton-ginning capacity or facilities that exist in the several States.

These figures, to you engineers, speak for themselves better than any words of mine. However, I venture to call your particular attention to the tabulation for the one State of North Carolina -- not that North Carolina is unique, but because the contrasts are possibly greater there than in the other States, and therefore can be more easily referred to.

You will note that during the 5-year period--1934 to 1938--the number of ginning establishments in North Carolina, as reported by the Bureau of the Census, fell from 1,260 to 1,108, a loss of 152 plants or 12.1 percent. Nevertheless, during the season of 1938-39--according to the Bureau of the Census--871 of these 1,108 gins were engaged in the process of ginning 390,416 bales (500-pound gross), or an average of 448 bales per ginning establishment, and 237 other gins, or 21.4 percent of the whole number, were idle. Even during the bumper crop year of 1937-38, there were 195 idle gins in North Carolina, and the active gins handled an average of only 824 bales.

During the 5-year period, an average of more than 19 percent of the gins have been idle and the active ones have averaged only 625 bales per gin.

Studies have shown that for a 4-80 gin to do sufficient business--not to make a profit but just to maintain the equipment on a fairly modern basis and therefore be able to render a fairly efficient service to farmers--it must handle at least 1,500 bales per season.

Is there any wonder at the resistance in some sections that this ginning laboratory meets, in its efforts to get into practice the technical refinements and the improvements in methods and equipment that result from its studies? Of course we appreciate the response that we do receive from the progressive ginners in every State, but they are the comparatively few who handle, we believe, above the average in number of bales.

Of the 1,108 gins in North Carolina, during the season of 1938-39, I would hazard a guess that about one-half of them handled 25, 50, 75, or 100 bales each--enough possibly to remove the rust from the saws and other equipment, accumulated since the heavy season of 1937-38, when these same gins possibly ginned 30, 60, 80, and 110 bales.

What I am leading up to is this: That to have handled the average crops of 1934 to 1938, inclusive, in an efficient manner with modern equipment, only about 397 gin establishments would have been needed in the State of North Carolina.

Of course, distance from the fields, transportation facilities, etc., doubtless would alter the picture, so that the problem is not as simple as might appear. Nevertheless, for profitable operation, the average output per gin establishment should certainly be not less than 1,000 bales, in which case 600 gins could have handled the 5-year average crop.

You can safely assume that the present gin plants cannot as a whole do a good job of preparing bales of cotton for farmers, cannot maintain their equipment in an up-to-date condition, cannot replace old, worn, or obsolete apparatus with modern machinery, and cannot but become more and more senile and ineffective. That 152 of them in North Carolina passed into oblivion between 1934 and 1938 illustrates this. How many more are tottering on the edge of a financial grave remains to be seen.

Doubtless, a large number of these gins are struggling along bolstered with the forlorn hope that some miracle may occur either to push the price of cotton so high that farmers will plant as many acres as they did before the boll weevil turned them to other crops; or, what is the same thing, that the substitute crops will not continue to be more remunerative than cotton. The farmers in North Carolina, it seems, have definitely turned away from cotton as their principal crop, and I am not very hopeful of the recent efforts that have been made to persuade them to plant even their full acreage allotment.

The chief animating cause of the cooperative gin idea apparently is inefficient, costly, and poor ginning. Sooner or later farmers will awaken to a realization that the costs of ginning are not limited to the actual charges for ginning, bagging, and ties, but also include the penalties that are assessed against the bale because of gin damage or even because of that type of poor ginning which results in no improvement in the grade through removal of moisture, trash, etc. It is then that producers band together and erect a cooperative gin, which, if successful, only hastens the bankruptcy of the formerly existing facilities.

Everyone of the present gins represent an investment, the loss of which is reflected in the average income of all the residents of a community. How much better it would be if four or five of the present gins in each community would realize the situation before it is too late, and combine their financial assets, salvage such parts of the old equipment as might

be worth salvaging, or buy modern machinery and erect a modern plant, either as a partnership or through cooperative stock, and place it in the hands of such farmers as might be progressive enough to join for the benefit of the whole community.

And here is the plan, as I see it, for you State engineers. Go back home and get a large outline map of your State, jot down in each county the average production in equivalent 500-pound bales, for comparative purposes, then spot every so-called gin. After due study, go into each community and suggest to the ginners and farmers whom you find there how best to consolidate. After you have accomplished this consolidation, your task of carrying home the solutions of technical questions that are developed in this laboratory will be simplified, and your job will be a pleasure instead of a headache.

In some instances, and particularly in some States, I appreciate that cotton ginning is not always a business, but is simply a side line and only incidental to such enterprises as feed-milling or saw-milling, ice and coal yards, etc.; and that under such circumstances, a cotton-ginning business of say 500 bales per season might warrant the owner to continue the side line; but in every such case the ginning apparatus must be idle many months of the year and therefore deteriorate with age if nothing else. Certainly a side line enterprise of 500 bales would offer little or no inducement to the installation of modern facilities or even for maintaining present facilities in their best mechanical condition.

The cotton-ginning facilities of each State would bear careful study and revamping before the full benefits of the results of studies made in this laboratory will become available to cotton growers generally.

Cotton-Ginning Capacity, by States, 1934-35 to 1938-39

State and year	Total gins	Active gins	Idle gins	Per-cent idle	Total 500-lb. bales ginned	Average bales per gin	Number of gins at 1500 bales each	Excess gin capacity
Alabama:								
1934	1,373	1,217	156	11.3	952,245	782	635	738
1935	1,346	1,221	125	9.3	1,061,314	869	708	638
1936	1,345	1,240	105	7.8	1,148,524	926	766	579
1937	1,336	1,241	95	7.1	1,636,363	1,319	1,091	245
1938	1,322	1,212	110	8.3	1,081,936	893	721	601
Average	1,334	1,226	118	8.8	1,176,076	959	784	550
5-yr. loss	51							
	3.8%							
Arkansas:								
1934	1,245	1,123	122	9.7	874,782	779	583	662
1935	1,234	1,129	105	8.5	857,156	759	571	663
1936	1,246	1,144	102	8.2	1,302,992	1,139	869	377
1937	1,251	1,166	85	6.8	1,915,206	1,642	1,277	---
1938	1,244	1,154	90	7.2	1,358,182	1,177	905	339
Average	1,244	1,143	101	8.1	1,261,664	1,104	841	403
5-yr. loss	1							
Georgia:								
1934	1,644	1,402	242	14.7	971,425	693	648	996
1935	1,620	1,410	210	12.9	1,062,526	754	708	912
1936	1,594	1,380	214	13.4	1,090,085	790	727	865
1937	1,562	1,391	171	10.9	1,505,946	1,083	1,004	558
1938	1,523	1,307	216	14.2	855,721	655	570	953
Average	1,589	1,378	211	13.3	1,097,141	796	731	858
5-yr. loss	121							
	7.4%							
Louisiana:								
1934	738	649	89	12.0	484,668	747	323	415
1935	735	645	90	12.2	556,288	862	371	364
1936	732	647	85	11.6	761,149	1,176	507	225
1937	721	658	63	8.7	1,103,622	1,677	736	---
1938	714	641	73	10.2	673,520	1,051	449	265
Average	728	648	80	11.0	715,849	1,105	477	251
5-yr. loss	24							
	3.3%							

contd.

State and year	Total gins	Active gins	Idle gins	Per-cent idle	Total 500-lb. bales ginned	Average bales per gin	Number of gins at 1500 bales each	Excess gin capacity
Mississippi:								
1934 ...	1,460	1,294	166	11.4	1,142,706	883	762	698
1935 ...	1,423	1,292	131	9.2	1,259,482	975	840	583
1936 ...	1,419	1,316	103	7.2	1,910,661	1,452	1,274	145
1937 ...	1,451	1,371	80	5.5	2,692,427	1,964	1,794	---
1938 ...	1,444	1,347	97	6.7	1,706,906	1,267	1,138	306
Average ...	1,439	1,324	115	8.0	1,742,436	1,316	1,162	277
5-yr. loss	16							
	1.1%							
N. Carolina:								
1934 ...	1,260	999	261	20.7	631,420	632	421	839
1935 ...	1,210	985	225	18.5	574,201	583	383	827
1936 ...	1,173	962	211	18.0	599,746	623	400	773
1937 ...	1,143	948	195	17.0	781,483	824	521	622
1938 ...	1,108	871	237	21.4	390,416	448	260	848
Average ...	1,179	953	226	19.2	595,453	625	397	782
5-yr. loss	152							
	12.1%							
Oklahoma:								
1934 ...	945	776	169	17.8	317,387	409	212	733
1935 ...	922	807	115	12.4	564,982	700	377	545
1936 ...	908	690	218	24.0	286,379	415	191	717
1937 ...	887	754	133	15.0	763,403	1,012	509	378
1938 ...	839	683	156	18.6	556,545	815	371	468
Average ...	900	742	158	17.6	497,739	671	332	568
5-yr. loss	106							
	11.2%							
S. Carolina:								
1934 ...	1,495	1,093	402	26.8	681,791	624	455	1,040
1935 ...	1,444	1,082	362	25.1	744,182	688	496	948
1936 ...	1,418	1,063	355	23.6	815,788	767	544	874
1937 ...	1,407	1,054	353	25.0	1,023,319	971	682	725
1938 ...	1,373	975	398	28.9	649,132	666	433	940
Average ...	1,427	1,053	374	26.2	782,842	743	522	901
5-yr. loss	122							
	8.1%							

contd.

State and year	Total gins	Active gins	Idle gins	Per-cent idle	Total 500-lb. bales ginned	Average bales per gin	Number of gins at 1500 bales each	Excess gin capacity
Tennessee:								
1934 ...	457	432	25	5.5	404,316	936	270	187
1935 ...	462	438	24	5.2	316,509	723	211	251
1936 ...	453	431	22	4.9	432,757	1,004	288	165
1937 ...	451	434	17	3.8	660,394	1,522	440	11
1938 ...	452	433	19	4.2	487,494	1,126	325	127
Average ...	455	434	21	4.6	460,294	1,060	307	148
5-yr. loss	5							
	1.1%							
Texas:								
1934 ...	3,640	3,240	400	10.9	2,407,979	743	1,605	2,035
1935 ...	3,583	3,348	235	6.5	2,960,774	885	1,974	1,609
1936 ...	3,536	3,274	262	7.4	2,938,479	898	1,959	1,577
1937 ...	3,497	3,295	202	5.8	5,163,895	1,567	3,443	54
1938 ...	3,413	3,161	252	7.4	3,093,911	979	2,063	1,350
Average ...	3,534	3,264	270	7.6	3,313,008	1,015	2,209	1,325
5-yr. loss	227							
	6.2%							